

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A signal processing method for reading data from a first recording medium on which multiplexed data obtained by multiplexing coded audio data and coded video data are recorded, and recording the data on a second recording medium, comprising:

a reading step of reading the multiplexed data from the first recording medium;

a decoding step of decoding at least one of: (i) at least part of the coded audio data included in the readout multiplexed data; and (ii) at least part of the coded video data which are included in the readout multiplexed data, to generate decoded data;

a designation step of designating a portion of the decoded data as a portion to be re-coded;

a re-coding step of re-coding the portion of the decoded data designated in the designation step by a coding method which is different from a first coding method used in a coding process of the coded audio data and a second coding method used in a coding process of the coded video data, to generate re-coded data; and

a recording step of recording the re-coded data on the second recording medium.

2. (Currently Amended) The signal processing method of Claim 1

wherein the decoding step is a step of decoding at least part of the coded audio data included in the readout multiplexed data, to generate decoded audio data; ~~and~~

the designation step includes designating a portion of the decoded audio data as the portion to be re-coded; and

~~the re-coding step is a step of~~ includes re-coding the portion of the decoded audio data designated in the designation step by a third coding method which is different from the first coding method, to generate re-coded audio data as the re-coded data.

3. (Currently Amended) The signal processing method of Claim 1

wherein the decoding step is a step of decoding at least part of the coded video data included in the readout multiplexed data, to generate decoded video data; ~~and~~

the designation step includes designating a portion of the decoded video data as the portion to be re-coded; and

the re-coding step is a step of includes re-coding the portion of the decoded video data designated in the designation step by a ~~fourth~~third coding method which is different from the second coding method, to generate re-coded video data as the re-coded data.

4. (Currently Amended) The signal processing method of Claim 1

wherein the decoding step is a step of decoding at least part of the coded video data included in the readout multiplexed data, to generate decoded video data;

the designation step includes designating a portion of the decoded video data as the portion to be re-coded;

the re-coding step is a step of includes re-coding the portion of the decoded video data designated in the designation step by a ~~fourth~~third coding method which is different from the second coding method, to generate re-coded video data; and

the recording step is a step of includes recording at least part of the coded audio data included in the readout multiplexed data and the re-coded video data on the second recording medium.

5. (Currently Amended) The signal processing method of Claim 1

wherein the decoding step is a step of decoding at least part of coded audio data included in the readout multiplexed data, to generate decoded audio data;

the designation step includes designating a portion of the decoded audio data as the portion to be re-coded;

the re-coding step is a step of includes re-coding the portion of the decoded audio data designated in the designation step by a third coding method which is different from the first coding method, to generate re-coded audio data; and

the recording step is a step of includes recording at least part of the coded video data included in the readout multiplexed data and the re-coded audio data on the second recording medium.

6. (Currently Amended) The signal processing method of Claim 1

wherein the decoding step is a step of decoding at least part of the coded audio data and at least part of the coded video data which are included in the readout multiplexed data, to generate decoded audio data and decoded video data, respectively;

the designation step includes designating portions of the decoded audio data and decoded video data as portions to be re-coded;

the re-coding step ~~is a step of~~ includes re-coding the portion of the decoded audio data designated in the designation step by a third coding method which is different from the first coding method, to generate re-coded audio data, as well as re-coding the portion of the decoded video data designated in the designation step by a fourth coding method which is different from the second coding method, to generate re-coded video data; and

the recording step ~~is a step of~~ includes recording the re-coded audio data and the re-coded video data on the second recording medium.

7. (Currently Amended) The signal processing method of Claim 3 wherein the second coding method is MPEG method, and the ~~fourth~~ third coding method is JPEG method.

8. (Currently Amended) The signal processing method of Claim 1

wherein the coded video data is ~~one which is~~ coded video data obtained by coding a video signal using MPEG method as the second coding method;

the decoding step includes decoding the coded video data and the coded audio which are included in the readout multiplexed data, to generate decoded video data and decoded audio data;

the ~~decoding~~ designation step ~~is a step of decoding~~ includes designating at least a specific portion of the coded video data included in the readout multiplexed data, which portion corresponds to one field or one frame, as a portion to be re-coded ~~to generate decoded video data~~, as well as ~~decoding~~ designating a portion ~~a prescribed amount of the coded audio data included in the readout multiplexed data, sequentially from a portion thereof relating~~ which portion relates to the specific portion, as a portion to be re-coded ~~to generate decoded audio data; and~~

the re-coding step ~~is a step of~~ includes re-coding at least part the portion of the decoded video data designated in the designation step by JPEG method to generate re-coded video data, as well as re-coding the portion of the decoded audio data designated in the designation step by a third coding method which is different from the first coding method to generate re-coded audio data.

9. (Currently Amended) A signal processing method for reading data from a first recording medium on which multiplexed data obtained by multiplexing coded audio data and coded video data are recorded, and recording the data on a second recording medium, comprising:

a reading step of reading the multiplexed data from the first recording medium;

a decoding step of decoding the coded video data and the coded audio data which are included in the readout multiplexed data to generate decoded video data and decoded audio data;

~~a decoding-designation step of decoding-designating at least a specific portion of the coded video data included in the readout multiplexed data, which portion corresponds to one field or one frame, to generate decoded video data as a portion to be re-coded, as well as decoding a prescribed amount of designating a portion of the coded audio data included in the readout multiplexed data, which portion relates to the specific portion, as a portion to be re-coded sequentially from a portion thereof relating to the specific portion, to generate decoded audio data;~~

a re-coding step of re-coding ~~at least part the portion~~ of the decoded video data designated in the designation step by JPEG method which is different from MPEG method used in a coding process of the coded video data, to generate re-coded video data, as well as re-coding the portion of the decoded audio data designated in the designation step by a third coding method which is different from a first coding method used in a coding method of the coded audio data, to generate re-coded audio data; and

a recording step of recording the re-coded video data and the re-coded audio data on the second recording medium.

10. (Currently Amended) A signal processing method for reading data from a first recording medium on which multiplexed data obtained by multiplexing coded audio data and coded video data are recorded, and recording the data on a second recording medium, comprising:

a reading step of reading the multiplexed data from the first recording medium;

a decoding step of decoding at least part of the coded video data included in the readout multiplexed data, to generate decoded video data;

a conversion step of subjecting the decoded video data to a resolution conversion process for thinning out pixel values or a conversion process for converting a data format, to generate converted video data;

a designation step of designating a portion of the converted decoded video data as a portion to be re-coded;

a re-coding step of re-coding the portion of the converted decoded video data designated in the designation step to generate re-coded video data; and

a recording step of recording the re-coded video data on the second recording medium.

11. (Currently Amended) A signal processing apparatus for reading data from a first recording medium on which multiplexed data obtained by multiplexing coded audio data and coded video data are recorded, and recording the data on a second recording medium, comprising:

a reading unit for reading the multiplexed data from the first recording medium;

a decoder for decoding at least one of: (i) at least part of the coded audio data included in the readout multiplexed data; and (ii) at least part of the coded video data ~~which are included in the readout multiplexed data,~~ and outputting decoded data;

a designation step of designating a portion of the decoded data as a portion to be re-coded;

a re-encoder for re-coding the portion of the decoded data designated in the designation step by a coding method which is different from a first coding method used in a coding process of the coded audio data and a second coding method used in a coding process of the coded video data, and outputting re-coded data; and

a recording unit for recording the re-coded data on the second recording medium.

12. (Currently Amended) A signal processing apparatus for reading data from a first recording medium on which multiplexed data obtained by multiplexing coded audio data and coded video data are recorded, and recording the data on a second recording medium, comprising:

a reading unit for reading the multiplexed data from the first recording medium;

a video decoder for decoding ~~at least a specific portion of the~~ coded video data included in the readout multiplexed data, ~~which portion corresponds to one field or one frame,~~ and outputting decoded video data;

an audio decoder for decoding ~~a prescribed amount of the~~ coded audio data included in the readout multiplexed data, ~~sequentially from a portion thereof relating to the specific portion,~~ and outputting decoded audio data;

a designation unit for designating a specific portion of the decoded video data, the specific portion corresponding to at least one field of one frame, as a portion to be re-coded, as well as designating a portion of the decoded audio data, which portion relating to the specific portion, as a portion to be re-coded;

a video encoder for re-coding ~~at least part the~~ portion of the decoded video data designated in by the designation unit by JPEG method which is different from MPEG method used in a coding process of the coded video data, and outputting re-coded video data;

an audio encoder for re-coding the portion of the decoded audio data designated by the designation unit by a third coding method which is different from a first coding method used in a coding process of the coded audio data, to generate re-coded audio data; and

a recording unit for recording the re-coded video data and the re-coded audio data on the second recording medium.

13. (Currently Amended) A signal processing apparatus for reading data from a first recording medium on which multiplexed data obtained by multiplexing coded audio data

and coded video data are recorded, and recording the data on a second recording medium, comprising:

a reading unit for reading the multiplexed data from the first recording medium;

a video decoder for decoding at least part of the coded video data included in the readout multiplexed data, to generate decoded video data;

a data converter for subjecting the decoded video data to a resolution conversion process for thinning out pixel values or a conversion process for converting a data format, to generate converted video data;

a designation unit for designating a portion of the decoded video data as a portion to be re-coded;

an encoder for re-coding the portion of the converted video data designated by the designation unit to generate re-coded video data; and

a recording unit for recording the re-coded video data on the second recording medium.

14. (Currently Amended) The signal processing method of Claim 4 wherein the second coding method is MPEG method, and the ~~fourth~~ third coding method is JPEG method.

15. (Previously Presented) The signal processing method of Claim 6 wherein the second coding method is MPEG method, and the fourth coding method is JPEG method.